

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Anthony Richard HUGGETT ) ) DECODING A SIGNAL  
Serial No. ) ENCODED WITH A  
 ) CONVOLUTIONAL CODE  
 )  
Filed: )  
 ) Group Art Unit:

**INFORMATION DISCLOSURE STATEMENT**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir,

Submitted herewith, is Form PTO/SB/08A, list of patent references, copy of cited references and the G.B. Search Report.

The claims that are now filed are amended over those searched by the G.B. Patent Office and now require a decision to be based on the known bit information without first modifying the path metrics for the discarded states. This feature is in claim 1, sub-paragraph (b), and has corresponding claim language in the decoder claim 4.

EP 0612166A2 (NEC) and U.S. 2001/0000706A1 (Butler et al) disclose a method of restricting the previous states which the Viterbi algorithm is free to choose. In both cases the path metrics are modified for the paths that end in unwanted states and this causes the decision to be heavily biased in favour of the previous path with the unmodified path metric.

EP 0332290A2 (Plessey) discloses a method where a known (pilot) sequence is used to generate a model of the multi-path channel. This model is then used to modify the input symbols or input metrics. There is no decision making in the sense of that required by the present invention.

U.S. 6089749 (Blaum et al) relates to byte synchronisation recovery at the output of a Viterbi decoder. Again, this reference does not disclose the above-noted feature of the subject application.

Neither U.S. 2002/0144209A1 (Ariel et al) or U.S. 6476739B1 (Lui et al) disclose the essential features of the subject application.

Respectfully Submitted,

Date 3/25/04

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(use as many sheets as necessary)*

Sheet

of

**Complete if Known**

Application Number

Filing Date

First Named Inventor

Anthony Richard HUGGETT

### Group Art Unit

Attorney Docket Number

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

Examiner  
Signature

Date  
Considered

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